



Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2014 Accomplishment Plan

General Information

Date: 07/26/2021

Project Title: Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation

Funds Recommended: \$2,440,000

Legislative Citation: ML 2014, Ch. 256, Art. 1, Sec. 2, Subd. 5(e)

Appropriation Language: \$2,440,000 in the second year is to the commissioner of natural resources for an agreement with the Bois de Sioux Watershed District to acquire land in fee and to restore natural systems associated with the Mustinka River located within the Bois de Sioux Watershed. Lands acquired with this appropriation may not be used for emergency haying and grazing in response to federal or state disaster declarations. Conservation grazing under a management plan that is already being implemented may continue. A list of proposed land acquisitions must be provided as part of the required accomplishment plan.

Additional Legislative Changes: ML 2021, First Sp Session, Ch. 1, Art. 1, Sec. 2, Subd. 10 Carryforwards (c) The availability of the appropriation in Laws 2014, chapter 256, article 1, section 2, subdivision 5, paragraph (e), for Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation, is extended to June 30, 2024.

ML 2018, Ch. 208, Art. 1, Sec. 2, Subd 10 Carryforwards: (a) The availability of the appropriation in Laws 2014, chapter 256, article 1, section 2, subdivision 5, paragraph (e), for Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation is extended to June 30, 2022.

Manager Information

Manager's Name: Jamie Beyer

Title:

Organization: Bois de Sioux Watershed District

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City: Wheaton, MN 56537

Email: bdswd@runestone.net

Office Number: 320-563-4185

Mobile Number:

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Website:

Location Information

County Location(s): Traverse and Grant.

Eco regions in which work will take place:

- Prairie

Activity types:

- Protect in Fee
- Restore

Priority resources addressed by activity:

- Habitat

Narrative

Abstract

This habitat project presents a unique opportunity within the prairie region to convert 5.5 miles of ditched river to 8+ mile long stream channel within a 359 acre fish and wildlife habitat corridor composed of riparian wetlands and grassland.

Design and Scope of Work

In the past 100 years, thousands of miles of rivers and streams in Minnesota were straightened and thousands of acres of riparian wetland and grassland habitat has been lost in the interest of improving drainage. The Mustinka River was first channelized as a state ditch in 1896 and again as an Army Corps of Engineers project in the early 1950's. This channelization resulted in a direct conversion of about 43 miles of natural sinuous channel and floodplain corridor to about 25 miles of straightened channel without a functional riparian corridor. The Mustinka River (Judicial Ditch 14) currently provides little functional aquatic or riparian corridor habitat. This stream corridor project will rehabilitate a 5.5 mile portion and directly provide both fish and wildlife habitat benefits in the prairie region.

This stream corridor rehabilitation project will convert 5.5 miles of the upper reaches of the Mustinka River to a more functional 8 to 9 mile long meandering channel within a 300 foot wide, 442 acre floodplain corridor. The stream rehabilitation will be based on the principles of natural channel design with an understanding of the hydrology and fluvial geomorphology at the site. The enhanced stream and associated riparian wetland habitats will provide seasonal spawning and nursery habitat to a variety of fish species including northern pike and walleye and some of the other 30+ fish species that are found in the Lake Traverse watershed.

In addition to the fish habitat directly provided in the 8 to 9 mile stream channel, the associated floodplain grassland and wetland habitat elements in the restored and protected 442 acre river corridor will provide year-round wildlife habitat. An estimated 90% of Minnesota's prairie wetlands have been lost due to agricultural drainage and development. The land adjacent to the Mustinka river was historically wet prairie and wetlands but was converted to farmland more than 80 years ago.

The Bois de Sioux Watershed District has led the development of this project through a "project team" process. This process has been a collaborative effort with members of the project team including the Traverse County Soil

and Water Conservation District, the Natural Resource Conservation Service, MN DNR, MPCA, USFWS, conservation groups, and landowners. The Bois de Sioux Watershed District will continue to lead the project and the MNDNR, as a non-funded collaborator, will provide technical assistance during the structure design phase and the development of the operating plan as well as ongoing project monitoring and evaluation of the operation, outcomes, and user groups.

The watershed district will be responsible for final design, engineering, and construction of the project. Minnesota Department of Natural Resource stream habitat experts will be consulted throughout project development and implementation. If funding for this corridor rehabilitation is not secured, the opportunity to rehabilitate this reach of the Mustinka River Corridor will be lost and it will remain a ditch.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds
- H6 Protect and restore critical in-water habitat of lakes and streams
- H7 Keep water on the landscape
- LU6 Reduce Upland and gully erosion through soil conservation practices

Which two other plans are addressed in this program?

- Long Range Plan for Fisheries Management
- Minnesota DNR Strategic Conservation Agenda
- Minnesota Prairie Conservation Plan
- Minnesota Sustainability Framework
- Minnesota's Wildlife Action Plan 2015-2025
- National Fish Habitat Action Plan
- Northern Tallgrass Prairie Ecoregion: A River and Stream Conservation Portfolio
- Other : Minnesota Fish Habitat Plan, Bois de Sioux Watershed District Plan; Minnesota DNR Stream Habitat Program Restoration Priority List
- Outdoor Heritage Fund: A 25 Year Framework
- Red River of the North Fisheries Management Plan

Which LSOHC state-wide priorities are addressed in this program?

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Produce multiple enduring conservation benefits
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model
- Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities
- Attempts to ensure conservation benefits are broadly distributed across the LSOHC sections
- Leverage effort and/or other funds to supplement any OHF appropriation
- Restore or enhance habitat on permanently protected land

- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work; provides the most cost-effective use of financial resources; and where possible takes into consideration the value of local outreach, education, and community engagement to sustain project outcomes

Which LSOHC section priorities are addressed in this program?

Prairie

- Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes
- Restore or enhance habitat on public lands

Does this program include leveraged funding?

-

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

The Bois de Sioux Watershed District will own the property in fee title and be responsible for long term maintenance of this project. Sustainability and maintenance of this channel rehabilitation is required within watershed district law (Minnesota Statutes 103D). Long term project maintenance is authorized and funded through established watershed district construction and maintenance funds.

The watershed district is leading the land acquisition, project development, and engineering of this project with full cooperation of a watershed-based "project team" composed of landowners and representatives of local, state, and federal agencies.

Activity Details

Requirements

Will local government approval be sought prior to acquisition?

Yes

Is the land you plan to acquire (fee title) free of any other permanent protection?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15?

Yes

Where does the activity take place?

- Public Waters
- Other : no

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?

-

Is this land currently open for hunting and fishing?

Yes

Describe any variation from the State of Minnesota regulations:

No variation from state regulations. Not currently open, but post-construction.

Timeline

Activity Name	Estimated Completion Date
Environmental Review	Completed 2014, Reaffirmed 2021
Finalize Plans and Specifications	Completed 2021, Awaiting Final Permits
Land Acquisition	Completed
Construction	Anticipated Fall 2022 or Spring 2023, Waiting Final Permits & Funding from LCCMR, BWSR, RRWMB
Post-Construction Maintenance - Vegetation establishment; stable channel	2024

Date of Final Report Submission: 11/01/2024

Budget

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan.

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	-	-	-
Contracts	\$2,440,000	\$2,592,400	BdSWD, RRWMB, LCCMR	\$5,032,400
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	\$344,700	BdSWD, RRWMB, LCCMR	\$344,700
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	-	\$118,600	BdSWD, RRWMB, LCCMR	\$118,600
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	\$2,440,000	\$3,055,700	-	\$5,495,700

Amount of Request: \$2,440,000

Amount of Leverage: \$3,055,700

Leverage as a percent of the Request: 125.23%

DSS + Personnel: -

As a % of the total request: 0.0%

Easement Stewardship: -

As a % of the Easement Acquisition: -

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?

Federal Funds

Do you anticipate federal funds as a match for this program?

No

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	0	442	442
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	0	0	0	442	442

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	\$2,440,000	\$2,440,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	-	-	-	\$2,440,000	\$2,440,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	442	0	442
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	442	0	442

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	\$2,440,000	-	\$2,440,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	-	-	-	\$2,440,000	-	\$2,440,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	\$5,520
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	\$5,520	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State	-	-	-	-	-

PILT Liability					
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

8

Outcomes

Programs in prairie region:

- Protected, restored, and enhanced shallow lakes and wetlands ~ *The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- Expiring CRP lands are permanently protected ~ *The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- Other ~ *The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- Agriculture lands are converted to grasslands to sustain functioning prairie systems ~ *The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- Increased wildlife productivity ~ *The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be*

measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.

- *Restored and enhanced upland habitats ~ The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- *Water is kept on the land to reduce flood potential and degradation of aquatic habitat ~ The amount of riparian wetland restored and protected will be measured and reported. Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported. Pre and post project amounts of agricultural lands will be measured and reported. The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported. The amount of riparian grassland acres restored and protected will be measured and reported. Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*

Parcels

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Parcel Information

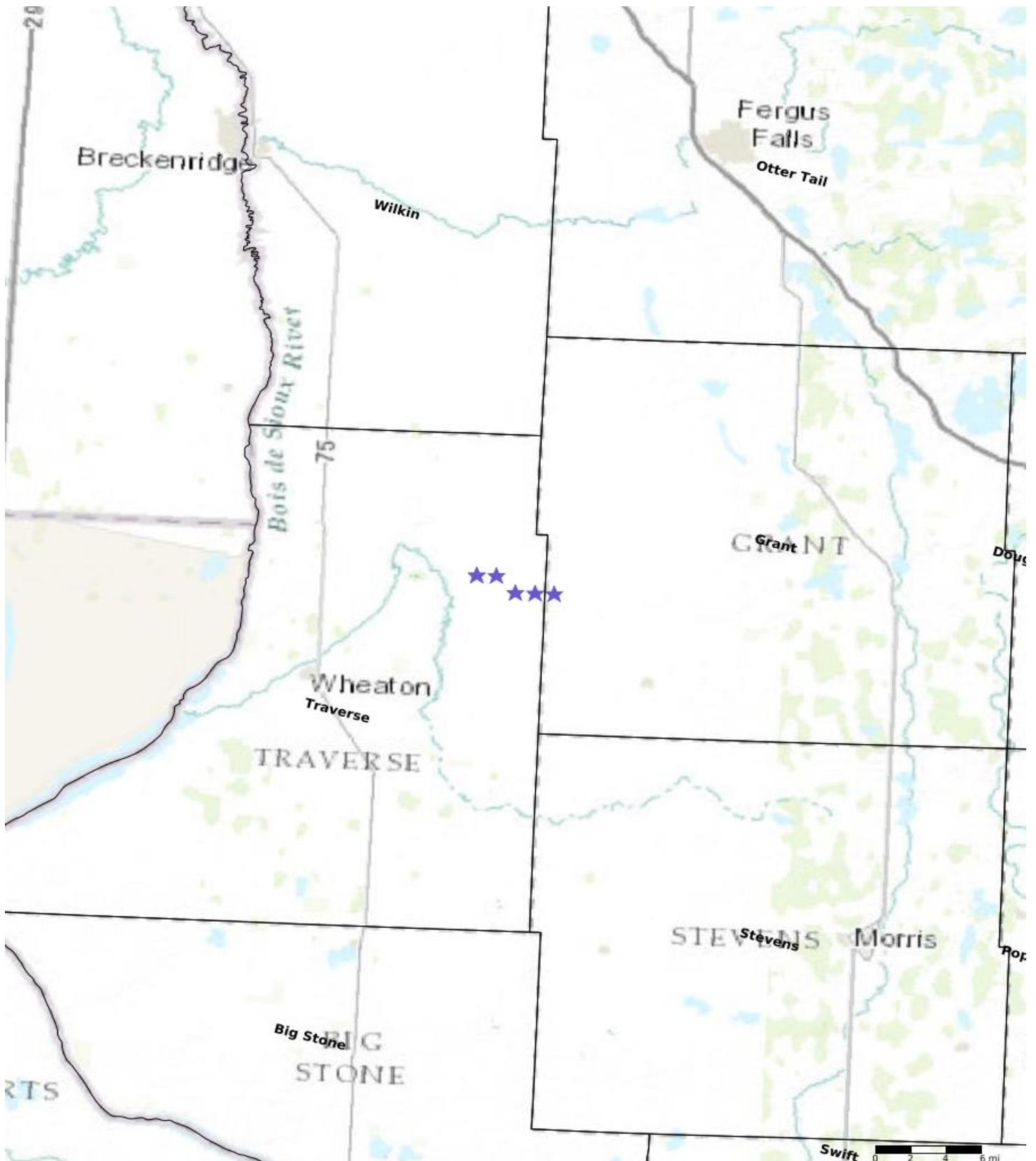
Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Parcel 13	Grant	12844219	35	\$203,300	No
Parcel 9	Traverse	12845224	17	\$99,300	No
Parcel 8	Traverse	12845224	55	\$318,900	No
Parcel 7	Traverse	12845223	39	\$228,600	No
Parcel 6	Traverse	12845223	58	\$338,800	No
Parcel 5	Traverse	12845215	40	\$234,100	No
Parcel 4	Traverse	12845215	45	\$261,200	No
Parcel 3	Traverse	12845216	46	\$264,500	No
Parcel 2	Traverse	12845216	24	\$156,300	No
Parcel 10	Traverse	12844219	0	\$179,100	No
Parcel 1	Traverse	12845216	23	\$154,800	No



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other

Parcel Map
Mustinka River Fish and Wildlife Habitat Corridor
Rehabilitation
 (Data Generated From Parcel List)